REMARKS

In the Final Office Action dated December 20, 2005, the rejected claims 1, 5, 6, and 14 under 35 U.S.C. § 102(e) as being anticipated by IVERSON et al. (U.S. Patent No. 6,052,379); rejected claims 2, 3, 7-11, 13, and 15-22 under 35 U.S.C. § 103(a) as being unpatentable over IVERSON et al. in view of HO (U.S. Patent No. 6,862,270); rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over IVERSON et al. in view of Applicants' allegedly admitted prior art; and rejected claim 12 as being unpatentable over IVERSON et al. in view of HO and further in view of CHIRUVOLU (U.S. Patent No. 6,839,321).

Claims 1 - 22 remain pending in the present application. Reconsideration and allowance of all claims in view of the following remarks is respectfully requested.

Claim Rejections under 35. U.S.C. § 102

Claims 1, 5, 6, and 14 stand rejected under 35 U.S.C. § 102(a) as allegedly anticipated by IVERSON et al. Applicants respectfully traverse.

The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention always rests upon the Examiner. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). A proper rejection under 35 U.S.C. § 102 requires that a single reference teach *every aspect* of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1987).

Independent claim 1, for example, recites a method for allocating bandwidth in a network appliance, where the network appliance includes a plurality of guaranteed bandwidth buckets

used to evaluate when to pass traffic through the network appliance. The method includes providing a shared bandwidth bucket associated with a plurality of the guaranteed bandwidth buckets; allocating bandwidth to the shared bandwidth bucket based on the underutilization of bandwidth in the plurality of guaranteed bandwidth buckets; and sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to the individual guaranteed bandwidth buckets including borrowing bandwidth from the shared bandwidth bucket by a respective guaranteed bandwidth bucket to allow traffic to pass immediately through the network appliance. IVERSON et al. does not disclose this combination of features.

For example, IVERSON et al. does not disclose or suggest providing a shared bandwidth bucket associated with a plurality of the guaranteed bandwidth buckets. The Examiner relies on the Abstract, Fig. 10, and col. 17, line 56 – col. 18, line 19 of IVERSON et al. for allegedly disclosing this feature (Office Action, pg. 2). Applicants disagree.

At col. 17, line 56 – col. 18, line 19 of IVERSON et al. discloses:

> If the BpCSum is positive, the port was requesting bandwidth at a rate below the CIR+B_c for at least the last measurement interval. If the BpCSum is zero, port bandwidth requests have been substantially equal to the CIR+B_c for the port. If the water level in CSum is negative (below the midpoint), the rate that the port has been using bandwidth is above CIR+B_c. If the port has accumulated any excess bandwidth credit by transmitting below CIR for some amount of time, this bandwidth credit will be used if the water level in the first bucket goes below zero.
>
> BpEsum is the water level value in the second bucket 404 and represents the current accumulated value of unused bandwidth in excess of CIR+B_c (i.e. past overflows from the first bucket 402). The ESum bucket 404 represents a cache of excess bandwidth that the user 62 can save up to be used for longer periods of high transmission demand.
>
> Every measurement interval the quantum of bits 400 are added to the first bucket 402. Any overflow of bandwidth above the limit of the first bucket 402 is added to the ESum bucket 404.

> Both buckets are "leaky" in that the amount of traffic transmitted in the past measurement interval leaks out of the appropriate bucket based on the previous priority level. The current water level of each bucket is then the result of adding in the Committed Information Rate (CIR) bit quantum for the last measurement interval and subtracting the amount of outgoing traffic 409 actually transmitted in the last measurement interval, T1Out. The water level of bucket 402 determines a priority value in a high priority band 403. The water level of bucket 404 determines a priority value in a low priority band 405.

This section of IVERSON et al. discloses a leaky bucket priority scheme, wherein excess bandwidth credits for first bucket 402 are added to the ESum bucket 404. The excess bandwidth stored in bucket 404 is then used when the level of the first bucket 402 drops below zero. This section of IVERSON et al. does not disclose providing a shared bandwidth bucket associated with a **plurality** of guaranteed bandwidth buckets, as recited in claim 1. Even assuming *arguendo* that IVERSON et al. disclose a shared bandwidth bucket associated with a single guaranteed bandwidth bucket (e.g., First Bucket 402), this association is a one-to-one association, resulting in bandwidth overages from bucket 402 being applied to bucket 404 for subsequent use when the level of bucket 402 drops below zero. Contrary to this disclosure, claim 1 recites a shared bandwidth bucket being associated with a **plurality of guaranteed bandwidth buckets**. By associating multiple guaranteed bandwidth buckets with a shared bandwidth bucket, traffic resources may be more optimally distributed. Clearly, IVERSON et al. fails to disclose each and every element of claim 1, as required under 35 U.S.C. § 102.

In responding to Applicants prior arguments relating to claim 1, the Examiner indicates that the "'first bucket' in Iverson is the CIR and what can be considered the "second and third bucket" are buckets 402 and 404. (Office Action, pg. 11). Following through on this rationale, equating the system of IVERSON et al. to the method of claim 1, IVERSON et al. must disclose,

either explicitly or inherently, allocating bandwidth to the Second Bucket 404 based on the underutilization of bandwidth in the CIR 400 and the First Bucket 402; and sharing excess bandwidth developed from the underutilization of the guaranteed bandwidth allocated to CIR 400 and First Bucket 402 including borrowing bandwidth from the Second Bucket 404 by a respective guaranteed bandwidth bucket (i.e., CIR 400 and First Bucket 402) to allow traffic to pass immediately through the network appliance. Clearly, IVERSON et al. does not disclose or even remotely suggest allocating bandwidth to the Second Bucket 404 based on the underutilization of bandwidth in CIR 400. On the contrary, all bandwidth delivered by CIR 400 is 'used' in terms of its allocation to a port. As described above, Second Bucket 404 is clearly associated directly with First Bucket 402 to maintain excess bandwidth allocated to, but not used by, First Bucket 402.

Furthermore, in responding to Applicants prior remarks, the Examiner indicated that the mere duplication of essential working parts of a device involves only routine skill in the art (citing St. Regis Paper Co. v. Bemis Co., 193 USPQ 8). It should be initially noted, that the cited "rule" relates to findings of obviousness rather than anticipation, since rejections under 35 U.S.C. §102 must disclose each and every feature of a claimed invention. Accordingly, failing to disclose a claimed duplicative feature, prevents application of §102.

Additionally, the examiner does not compare the facts in St. Regis Paper Co. with those in the present case and explain why, based upon this comparison, the legal conclusion in the present case should be the same as that in St. Regis Paper Co. Instead, the examiner relies upon St. Regis Paper Co. as establishing a per se rule that duplication of parts involves only routine skill in the art. As stated by the Federal Circuit in In re Ochiai, 71 F.3d 1565, 1572, 37 USPQ2d

1127, 1133 (Fed. Cir. 1995), "reliance on per se rules of obviousness is legally incorrect and must cease." For a prima facie case of obviousness (or anticipation, in this case) to be established, the teachings from the prior art itself must appear to have suggested the claimed subject matter to one of ordinary skill in the art. See In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). The mere fact that the prior art *could* be modified as proposed by the examiner is not sufficient to establish a prima facie case of obviousness. See In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). The examiner must explain why the prior art would have suggested to one of ordinary skill in the art the desirability of the modification. See Fritch, 972 F.2d at 1266, 23 USPQ2d at 1783-84.

For at least the foregoing reasons, Applicants submit that claim 1 is patentable over IVERSON et al.

Claims 5 and 6 depend from claim 1. Therefore, these claims are patentable over IVERSON et al. for at least the reasons given above with respect to claim 1.

Independent claim 14 recites features similar to features recited above with respect to claim 1. Therefore, this claim is patentable over IVERSON et al. for at least reasons similar to reasons given above with respect to claim 1. Moreover, this claim recites defining a guaranteed bandwidth allocation for a first policy for passing traffic through the network appliance including using a first bucket to allocate the guaranteed bandwidth and defining a guaranteed bandwidth allocation for a second policy for passing traffic through the network appliance including using a second bucket to allocate the guaranteed bandwidth. Furthermore, claim 14 recites borrowing bandwidth from the shared bandwidth bucket by one of the first and second buckets when the respective bucket has insufficient bandwidth to allow traffic to pass immediately through the

network appliance. IVERSON et al. does not disclose or suggest these features.

The Examiner does not address these features in the Office Action. More particularly, the Examiner does not indicate how IVERSON et al. discloses or suggests a first policy using a first bucket to allocate the guaranteed bandwidth, a second policy using a second bucket to allocate the guaranteed bandwidth, and borrowing bandwidth from the shared bandwidth bucket by one of the first and second buckets when the respective bucket has insufficient bandwidth to allow traffic to pass immediately through the network appliance. Rather, the Examiner merely indicates that claim 14 is rejected for similar reasons as stated above. (Office Action, pg. 3). The above identified features of claim 14 are not present in claim 1 and a rejection thereof is not supported based on a rejection of claim 1. Accordingly, a *prima facie* case of obviousness has not been established with respect to claim 14.

For at least the foregoing reasons, Applicants submit that claim 14 is patentable over IVERSON et al.

Claim Rejections under 35. U.S.C. § 103

Claims 2, 3, 7-11, 13, and 15-22 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over IVERSON et al. in view of HO. Applicants respectfully traverse.

In rejecting a claim under 35 U.S.C. § 103, the Examiner must provide a factual basis to support the conclusion of obviousness. In re Warner, 379 F.2d 1011, 154 USPQ 173 (CCPA 1967). Based upon the objective evidence of record, the Examiner is required to make the factual inquiries mandated by Graham v. John Deere Co., 86 S.Ct. 684, 383 U.S. 1, 148 USPQ 459 (1966). The Examiner is also required to explain how and why one having ordinary skill in

the art would have been realistically motivated to modify an applied reference and/or combine applied references to arrive at the claimed invention. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 5 USPQ2d 1434 (Fed. Cir. 1988).

In establishing the requisite motivation, it has been consistently held that the requisite motivation to support the conclusion of obviousness is not an abstract concept, but must stem from the prior art as a whole to impel one having ordinary skill in the art to modify a reference or to combine references with a reasonable expectation of successfully achieving some particular realistic objective. See, for example, Interconnect Planning Corp. v. Feil, 227 USPQ 543 (Fed. Cir. 1985). Consistent legal precedent admonishes against the indiscriminate combination of prior art references. Carella v. Starlight Archery, 804 F.2d 135, 231 USPQ 644 (Fed. Cir. 1986); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 227 USPQ 657 (Fed. Cir. 1985).

Claims 2, 3, 7-11, and 13 depend from claim 1 and, as such, include each and every limitation included within the claims from which they depend. The disclosure of HO does not cure the deficiency in the disclosure of IVERSON et al. identified above, with respect to claim 1. Therefore, claims 2, 3, 7-11, and 13 are patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

Independent claim 15 recites features similar to features recited above with respect to claim 1. The disclosure of HO does not cure the deficiency in the disclosure of IVERSON et al. identified above, with respect to claim 1. Therefore, claim 15 is patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination, for at least reasons similar to

reasons given above with respect to claim 1.

For at least the foregoing reasons, Applicants submit that claim 15 is patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination.

Independent claim 16, as amended, recites a network device including a first bucket configured to receive tokens at a first information rate; a second bucket configured to receive tokens at a second information rate; a third bucket configured to receive extra tokens from the second bucket; and a scheduler configured to: determine if a size of traffic received at the network device exceeds a number of tokens stored in the first bucket, determine, when the size of the traffic does not exceed the number of tokens stored in the first bucket, if a size of the traffic exceeds a number of tokens stored in the second bucket, and transfer, when the size of the traffic exceeds the number of tokens stored in the second bucket, an appropriate number of tokens from the third bucket to the second bucket so that the second bucket includes a number of tokens that equals or exceeds the size of the traffic. IVERSON et al. and HO do not disclose or suggest this combination of features recited in claim 16, either alone or in any reasonable combination.

For example, neither IVERSON et al. or HO disclose or suggest a first bucket configured to receive tokens at a first information rate; a second bucket configured to receive tokens at a second information rate; and a third bucket configured to receive extra tokens from the second bucket. Therefore, claim 16 is patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination.

Claims 17-19 depend from claim 16 and, as such, include each and every limitation included within the claims from which they depend. Therefore, claims 17-19 are patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination, for at least the

reasons given above with respect to claim 16.

Independent claim 20, as amended, recites features similar to features recited above with respect to claim 16. Therefore, this claim is patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination, for reasons similar to reasons given above with respect to claim 16.

Claims 21 and 22 depend from claim 20 and, as such, include each and every limitation included within the claims from which they depend. Therefore, these claims are patentable over IVERSON et al. and HO, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 20.

Claim 4 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over IVERSON et al. in view of Applicants' allegedly admitted prior art. Applicants respectfully traverse.

Claim 4 depends from claim 1 and, as such, include each and every limitation included within the claim from which it depends. The disclosure of Applicants' allegedly admitted prior art does not remedy the deficiencies in the disclosure of IVERSON et al. set forth above with respect to claim 1. Therefore, claim 4 is patentable over IVERSON et al. and Applicants' admitted prior art, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

Claim 12 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over IVERSON et al. in view of CHIRUVOLU. Applicants respectfully traverse.

Claim 12 depends from claim 1. The disclosure of CHIRUVOLU does not remedy the deficiencies in the disclosure of IVERSON et al. set forth above with respect to claim 1.

Therefore, claim 4 is patentable over IVERSON et al. and CHIRUVOLU, whether taken alone or in any reasonable combination, for at least the reasons given above with respect to claim 1.

In view of the foregoing remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

HARRITY SNYDER, L.L.P.

By: _____
Robin C. Clark
Reg. No. 40,956

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11350 Random Hills Road
Suite 600
Fairfax, Virginia 22030
Telephone: (571) 432-0800
Facsimile: (571) 432-0808